

Opening Date: 9/29/2014
Closing Date: Open Until Filled
Work Location: Austin, Texas
Posting Number: 15-05
Monthly Salary: \$5,432
Group/Class: B21 / 0242
Travel: None
Division: Operations & Administration / Information Technology
Number of Positions: 1
Position Number: 1290

JOB VACANCY NOTICE

Scientific Web Developer (Programmer III)

*Apply Via Mail/Hand Delivery: Texas Water Development Board
Stephen F. Austin Building, 1700 North Congress Ave., Room 670,
Austin, Texas 78701 or via facsimile (512) 463-7644, or email
hr@twdb.texas.gov. Refer to Human Resources (512) 475-2142
Equal Opportunity Employer*

Job Description

Performs moderately complex (journey-level) computer programming and software development work. Work involves assisting the Team Lead in coordinating programming projects, analyzing proposed computer applications; and providing technical assistance. Plans and analyzes user requirements, procedures and problems to automate processing and to improve existing systems. Assists in maintaining existing and new internal and open source software. Performs moderately complex data processing, quality assurance and management functions for water quality and other water-related time-series data. Assists in maintaining software that retrieves and inserts data into relational databases. Assists in maintaining data related webpages and fulfills customer requests for data. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment.

Essential Job Functions

- Assist in the identification and scheduling of project deliverables, milestones and required tasks
- Generate project requirements, provide effort estimates and resource requirements
- Develop, analyze and revise system design procedures, program code, test procedures and quality standards
- Prepare detailed analyses, plans, diagrams and verification procedures for existing and proposed computer applications
- Develop diagrams and flowcharts to represent operations and data flow for applications
- Code, test and debug computer application programs as outlined by technical and functional requirements
- Use current software design and development methodologies and techniques to ensure quality and maintainability of applications and systems
- Prepare test data and assist end users with testing
- Prepare instructions for use during production runs
- Prepare and develop instructions or manuals for end users
- Research and analyze project proposals and software and system modifications
- Analyze proposed computer applications in terms of equipment requirements and capabilities
- Analyze, review and revise code to increase operating efficiency or to adapt to new procedures
- Assist in the generation or installation of systems software
- Develop and implement specialized programs to supplement and enhance systems software
- Assist in maintaining the <http://waterdatafortexas.org> webpage.
- Assists in expanding the <http://waterdatafortexas.org> webpage to include new datasets.
- Perform related work as assigned

Minimum Qualifications

- Graduation from an accredited college or university with major coursework in Computer Science, Information Science, Information Technology or related field.
- Relevant experience may be substituted for education on a year-for-year basis
- One year of experience developing software applications using Python. Experience may be academic, open source or work related.

Female and minority applicants are encouraged to apply.

Males born on or after January 1, 1960, will be required to present proof of Selective Service registration on the first day of employment or proof of exemption from Selective Service registration requirement. All offers of employment are contingent upon the candidate having legal authorization to work in the United States. Failure to present such authorization within the time specified by the U.S. Department of Labor will result in the offer being rescinded. Only applicants interviewed will be notified of their selection or non-selection. Resumes will not be accepted in place of a completed State of Texas application unless indicated.

HR-002

Revised 4/11



The Texas Water Development Board does not discriminate on basis of race, color, national origin, sex, religion, age, or disability in employment or provision of services, programs, or activities. www.twdb.texas.gov/jobs

Job Vacancy Notice (cont.)

Posting number: 15-05

Preferred Qualifications

- Experience in the development and analysis of geospatial, engineering and/or scientific data.
- Experience with the graphical display of engineering and/or scientific data.
- Experience in the use of UNIX/Linux operating systems, with experience in systems administration.
- Experience in the development and analysis of time-series data.
- Experience with numerical and statistical methods.
- Experience with groundwater and/or surface water modeling.

Knowledge, Skills, and Abilities

- Knowledge and understanding of the Software Development Life Cycle (SDLC).
- Knowledge of relational databases and data management, with experience with PostgreSQL preferred.
- Knowledge of Microsoft SQL Server 2005/2008/2012.
- Knowledge of State of Texas environmental and natural resources, particularly water resources management.
- Knowledge of HTML, CSS, JavaScript, ASP .NET, C# and/or AJAX applications.
- Skill in the development of unit tested software.
- Skill in the development of web applications and/or web services using Python, with experience in Flask or Django preferred.
- Skill in the development of scientific Python applications, with experience in NumPy, SciPy or Pandas preferred.
- Skill in the development of FORTRAN applications.
- Skill in the deployment of software applications, with experience in Fabric or Ansible preferred.
- Skill in the use of distributed version control systems, with experience in GitHub preferred.
- Skill in providing excellent customer service, both internally and externally.
- Skill in decision making and problem solving.
- Ability to develop, analyze and design system requirements and processes.
- Ability to communicate both technical and non-technical issues effectively, both verbally and in writing.
- Ability to prioritize deadlines.
- Ability to multi-task and manage multiple projects with limited supervision.
- Ability to work and collaborate with others in multi-disciplinary teams.

Remarks

- Copy of required academic transcripts and/or licensures must be submitted at the time of hire. Failure to provide required documentation will result in no further consideration for employment.
- Important Notice: Otherwise qualified candidates who are ultimately considered for potential employment with the Texas Water Development Board may be the subject of a request for any criminal history record information maintained by the Texas Department of Public Safety (DPS). Evidence of a criminal conviction or other relevant information obtained from the DPS shall not automatically disqualify an individual from employment with the Texas Water Development Board.